

PORTLAND BREAKWATER.

THE foundation-stone of this national work was laid by Prince Albert on Wednesday week. The stone was a block weighing 14 tons; it was suspended by an iron chain, and being let slip after a bottle containing a plan of the breakwater, specimens of the coinage, &c., had been deposited, fell to the bottom of the sea, in the midst of a drenching shower of spray and a noise like thunder.

The construction of this breakwater, as many of our readers are aware, is not a new idea. It was first proposed by Mr. John Harvey, mechanic to George III., and afterwards post-master at Weymouth; and after whose death the subject continued in agitation partly by the efforts of Mr. Harvey's son. The attention of Government, however, was not steadily fixed upon the matter until 1846, when the Refuge Harbour Commission reported very strongly in its favour. But the work was not decided on, even then, until a second commission had confirmed the recommendation of the first, and pointed out the advantages which the proposed breakwater would secure. The necessary surveys were then made, and powers for the compulsory purchase of land obtained by Act of Parliament, after which Mr. Rendell, civil engineer, was authorised to prepare a design of the work. As planned by Mr. Rendell, it will shelter an area of 1,822 acres from the only wind to which it is exposed. From the eastern point of the island, it will run out 1,500 feet in an easterly direction, and then going off at an angle will be carried 6,000 feet to the north-east. At the angle there will be an opening of from 400 to 500 feet for the use of steamers and small craft, but the whole work will be 7,900 feet, or one mile four furlongs in length. Of this more than 7,000 feet will be built in from 5 to 8½ fathoms' depth at low water. Of the whole area there will be 1,544 acres having not less than 5 fathoms' average depth, and 1,072 acres with 6½ fathoms' average depth, thus making accommodation for the largest channel fleets and convoys known during the last continental war. From the facilities which the stone quarries on the island afford for the work, and the intended employment of convict labour for quarrying the stone and loading the waggons, the estimated cost is only 560,000*l*. A railway, with three inclines, drums, wire ropes, &c., will raise or lower the waggons, and carry stones from the top of the island to the spot where they are dropped into the sea. By means of self-registering 'weigh-bridges,' the weight of stone put into the breakwater can be exactly ascertained.

There are upwards of 500 convicts or workmen now on the spot, and it is said there will be shortly in all 800 employed, some in quarrying, others in squaring stone, others in making new roads and levelling the quarries for laying down the rails preparatory to the removal of the stone to the breakwater. The establishment, which can only be seen by an order from the Secretary of State, is constructed chiefly of wood and iron, so that it may be taken down and removed on the completion of the breakwater. Each man has a second separate sleeping cell, about 7 feet long by 4 feet wide and 7 feet high. These small cells are ranged four stories high, and open into four spacious halls which are so placed as to be under inspection from a central corridor, where the officers are stationed. All the necessary offices are placed in an adjoining building, where there is a large cookhouse, washhouse, and drying-shed, baths, &c. The large chapel and other buildings are still in progress. The building is now inclosed by a lofty wall at the edge of the quarry. On the outside are houses for the governor, chaplain, and superior officers; and extensive ranges of cottages for warders and others. There is also a large infirmary, protected from the prevailing winds by having been built in a large quarry. Instead of going to the expense of breaking up the large stones, and levelling the yard where the sick will take exercise, the rocks have been left, and a party of convicts, under the direction of a governor, have made walks among them. There is a gaometer from which all the buildings are lighted, and the supply of water is pumped up from a reservoir about 350 feet below the top of the rock.

CONSTRUCTION OF GREENHOUSES, &c. WITH METROPOLITAN BUILDINGS' ACT.

As doubts exist in the minds of not only builders and proprietors, but the district surveyors themselves, as to the requirements of the act in respect of greenhouses and such erections, it will be useful to give the decision of the referees (Messrs. Hosking and Poynter) in a recent case.

A conservatory was in course of erection for Mr. John Meek, against the back wall of a dwelling-house in the Peckham-road, district of Camberwell, and a requisition was forwarded to the referees, setting forth that the frames and sashes of the said conservatory had been prepared in wood, and that it was proposed to fix the same on dwarf brick walls on two sides, and to inclose the conservatory on the other side by a party wall; to which materials the district surveyor objected, being of opinion "that the bearers of the roof, and the angle and door posts ought to be made of fire-proof materials." At the hearing, it was stated "that the wall which will enclose one side of the said conservatory is a party fence wall, and that the bearers of the roof thereof for carrying the running sashes, will not be let into the external wall of Mr. Meek's house, which will enclose the said conservatory on another side; and the district surveyor stated that the said conservatory is intended to be 14 feet high in the highest part and is to be built as an addition to the dwelling-house with which it will communicate internally, and that it is to be heated by pipes from a boiler within the dwelling-house; and he contended that the sills and the bearers of the roof of the said conservatory ought to be of fire-proof materials, and that the outer quoin and the piers against the back wall of the house, and against the party fence wall, ought to be of brickwork, in order that the frames of the sashes might be set in reveals." The official referees awarded that it would not be contrary to the Act to build the conservatory in the manner and of the materials proposed, "provided that the party fence wall by which it is intended to enclose the said conservatory on one side thereof, and which by the erection of the said conservatory will be converted into a party wall, be carried up to the height required for party walls by Schedule D, Part 3. of the said Act, and be otherwise made conformable to the rules of the said Act with reference to party walls."

THE CANYNGE SOCIETY AND ST. MARY REDCLIFFE CHURCH, BRISTOL.

We have already spoken of the Canynge Society as having been established to assist in the restoration of that fine structure St. Mary Redcliffe, Bristol. On Thursday in last week the second anniversary meeting was held, when the active and able Mayor, Mr. J. Kerle Habersfield, presided, and 60 or 70 of the leading citizens assembled. From the report it appeared that nearly 500*l*. were raised by the society last year, and had been applied in the clerestory of the chancel, and that the amount of subscriptions for the current year has increased as much as could be expected.

The chairman performed his task well. The Rev. Mr. Whiah, Mr. R. P. King, Alderman Pountney, Mr. W. P. King, Mr. Garrard, the City Chamberlain, Alderman Wyld, Mr. G. F. Powell, and others addressed the meeting, but we must confine ourselves to a few memoranda which may assist the cause.

Mr. Proctor, the chairman of the Restoration Committee, made a strong and able appeal in favour of the church. He said it was now some years since they first endeavoured to impress upon their fellow-citizens the necessity of attending to the noble fabric for whose restoration they were associated. The dilapidations then going on could no longer be trifled with; but now, by the kind contributions of their fellow-citizens, the committee had been enabled to grapple with the evil, and to render the fabric secure at all events, and he did feel that with the assistance of the society they would be enabled very much to hasten the complete and perfect restoration of the church. He said "complete and perfect," because he felt assured that it would be impossible, now that general attention was drawn to the work, but

it must be so, and it ought in common credit to themselves to be speedy: it was the finest monument they possessed of the past, it was the most magnificent specimen of architectural beauty in the city, and what was it used for? to offer up thanksgivings and ask for future blessings. For what, too, did they ask? was it not for the prosperity of themselves and their land? And if they so prayed, was it creditable for them to allow the building in which they did so to fall in ruin before their faces? If it were necessary to say more, he would venture to add, though they were doing much toward the prosperity of their city, there was more than at first view appeared to be the case in the restoration of St. Mary Redcliffe, as regarded its conducement to that effect. If only as a matter of example, it was of great importance. The proper restoration of St. Mary Redcliffe would offer them an example which would stimulate them in the erection and maintenance of other public buildings, for no one could see the perfect beauties of that structure without being better educated in the beautiful, without feeling the power of beauty so strongly that they would not be able to tolerate the erection of such public buildings as would be a discredit to the city. Redcliffe Church was now seen black and bedizen with dirt, and yet they asked the poor to clean their houses: ought they not to restore this building, and give a tone and example to the poor? He wished he could impress upon them lines written in the days of yore, and make them feel their truth. The work then would be soon done:—

"If thou wouldst see famed Bristowe in full
prosperitie,
Take heed thou keep'st faire Redcliffe in true
sinceritie."

The architect, when his health was drunk, said he was sure they would exonerate him from any suspicion that self-interest alone led him to advocate the restoration of the church. He did not look upon the restoration as a matter of pounds, shillings, and pence. He believed that any architect who sat down to design or restore a church with no higher motive than 5 per cent. would not be likely to produce any effective results; and, indeed, he believed he would not be competent for the task at all. The church was most beautiful even in its ruins, although he hoped before a very long time to be able to show it as it had been. He had examined most of the noble structures in the low countries, in France and Germany, and he did not recollect one which surpassed in parts St. Mary Redcliffe. He had a full recollection of the beautiful feathery spires of Antwerp and Strasburg Cathedrals, of the sublimity of Notre Dame, and the richness of Chartres, but still he maintained that the tower of St. Mary Redcliffe was second to none. For piquancy of fancy he knew nothing throughout Germany or France which could compete with its north porch: if they looked at it foot by foot, it displayed the most extraordinary evidence of the fancy and genius of the old architects; every corbel was different, and manifested a degree of care and attention, an imagination and a fire that could not be surpassed; it was designed by men who knew what they were about, and carried out by others with heart and soul. It gave him great pleasure to see the way in which the workmen were pursuing the work, and if they continued to go on in the way they had begun, they would soon see the north porch as beautiful as ever. The necessity for the restoration had not taken that hold of the citizens of Bristol that it should have done. Love of country, love of the beautiful, love of God, too, should tend to make it an object of desire. Lord Palmerston the other night electrified the House of Commons by stating that public opinion was stronger than arms and cannons; that if public opinion was founded on justice and truth, arms and cannons would disappear before it. Let them, then, bring public opinion to bear on the present question, let it be shown that such a building was a means of education, and this point had been too much neglected,—let it be shown that the contemplation of a fine building has an exalting effect upon the mind, and he was sure that enough of public spirit would be excited amongst the wealth and intelligence of the city of Bristol to enable them to effect the restoration, and that speedily.